

# Work Order ID 86966

\*86966\*

Page 1

July-10-12 9:09:25 AM

Item ID: D2573 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Saddle, Aft Out 205  
 Start Date: 7/10/12 Start Qty: 6.00 \*6\* Cust Item ID:  
 Required Date: 8/10/12 Req'd Qty: 6.00 \*6\* Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/07/10 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2573	Rev E								

100 HAAS CNC VERTICAL MACHINING #1 0.00  
 \*100\* HAAS 1  
 HAAS CNC vertical machine #1  
 Memo  
 Program Batch No. 86966 Double check by: F.K. 1-Machine Step  
 No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine  
 Step No 2 per Folio FA051 and inspect per attached Dimension Sheets3-  
 Machine Step No 3 per Folio FA051 and insp  
 P.O. 12/09/05  
 F.K. 12/09/06

110 CONVENTIONAL MILLING MACHINE 0.00  
 \*110\* Mill Conv  
 Conventional Milling Machine  
 Memo  
 Machine keyway as per dwg D2573 & D2574  
 F.K. 12/09/06

120 QC2- Inspect parts off machine FAI/FAIB 0.00  
 \*120\* QC  
 Quality Control  
 Memo  
 F.K. 12/09/06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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July-10-12, 9:09:25 AM

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Required Date: 8/10/12 Req'd Qty: 6.00 \*6\* Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130	QC8- Inspect parts - second check	0.00							
*130*									
QC	Memo	0.00							
Quality Control									

140	Chemical Conversion Coat per QSI005 4.1	0.00							
*140*									
HandFinish	Memo	0.00							
Hand Finishing									

150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
*150*									
Powdercoat	Memo	0.00							
Powder Coating									

START TIME: 10:20 FINISH TIME: 10:50 OVEN TEMPERATURE:

320°F

m121841

m/f  
12/09/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**\*86966\***

Page 3

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 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>442</u>	0.00							
<b>*170*</b>									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

12/9/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Picklist Print

July-10-12 9:09:25 AM

Page 1

Work Order ID: 86966

Parent Item: D2573

Parent Item Name: Saddle, Aft Out 205

Start Date: 7/10/12

Required Date: 8/10/12

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: 1 As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007 Saddle Billet		Manufactured	No			100	Each	20.0000	1	6		7/10/09/05	

Location	Loc Qty	Loc Code
MAT041	17	
85432	17	
MAT042	3	
79875	1	
85432	2	
87630		
88516		

4  
2

Can not issue mat'l.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	86966
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.439	.439	.439	.439		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.500	.501	.500		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.502	.502	.503	.505		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.568	.571		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.126	.126	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.252	.252		
S	0.115	0.135		.127	.126	.129	.129		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.240	.240	.242	.241		
W	0.115	0.135		.126	.126	.127	.125		
X	0.308	0.313		.311	.311	.311	.311		
Y	0.760	0.765		.761	.761	.761	.761		
Z	0.352	0.372		.365	.365	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.626	.627	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.247	.250	.250	.249		
AE	1.500	1.520		1.514	1.514	1.513	1.513		
AF	0.115	0.135		.117	.117	.117	.117		
AG	0.240	0.280		.265	.265	.265	.265		
AH	0.240	0.260		.250	.250	.252	.251		
AI	2.000	2.020		2.004	2.003	2.003	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	FK
Date:	12/09/06

Audited by:	B.A
Date:	12/09/09

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	86966
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				5	6	3	4		
A	0.438	0.443		.439	.439				
B	1.745	1.755		1.750	1.750				
C	3.495	3.505		3.500	3.500				
D	1.745	1.755		1.750	1.750				
E	7.990	8.010		8.000	8.000				
F	0.490	0.510		.502	.501				
G	0.257	0.262		.258	.258				
H	0.375	0.380		.377	.377				
I	0.490	0.510		.506	.506				
J	1.174	1.184		1.179	1.179				
K	0.558	0.578		.571	.570				
L	1.174	1.184		1.179	1.179				
M	1.365	1.375		1.370	1.370				
N	2.495	2.505		2.500	2.500				
O	4.119	4.129		4.124	4.124				
P	0.115	0.135		.127	.127				
Q	0.115	0.135		.135	.135				
R	0.240	0.260		.253	.254				
S	0.115	0.135		.128	.128				
T	0.178	0.198		.188	.188				
U	3.210	3.250		3.230	3.230				
V	0.230	0.250		.240	.241				
W	0.115	0.135		.123	.125				
X	0.308	0.313		.311	.311				
Y	0.760	0.765		.761	.761				
Z	0.352	0.372		.365	.365				
AA	0.470	0.530		.500	.500				
AB	0.615	0.635		.627	.627				
AC	0.053	0.073		.063	.063				
AD	0.240	0.260		.249	.249				
AE	1.500	1.520		1.514	1.5145				
AF	0.115	0.135		.117	.117				
AG	0.240	0.280		.265	.265				
AH	0.240	0.260		.251	.251				
AI	2.000	2.020		2.004	2.0045				
AJ	0.023	0.043		.033	.033				
Accept/Reject									

Measured by:	F.K.
Date:	12/09/06

Audited by:	B.A.
Date:	12/09/09

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

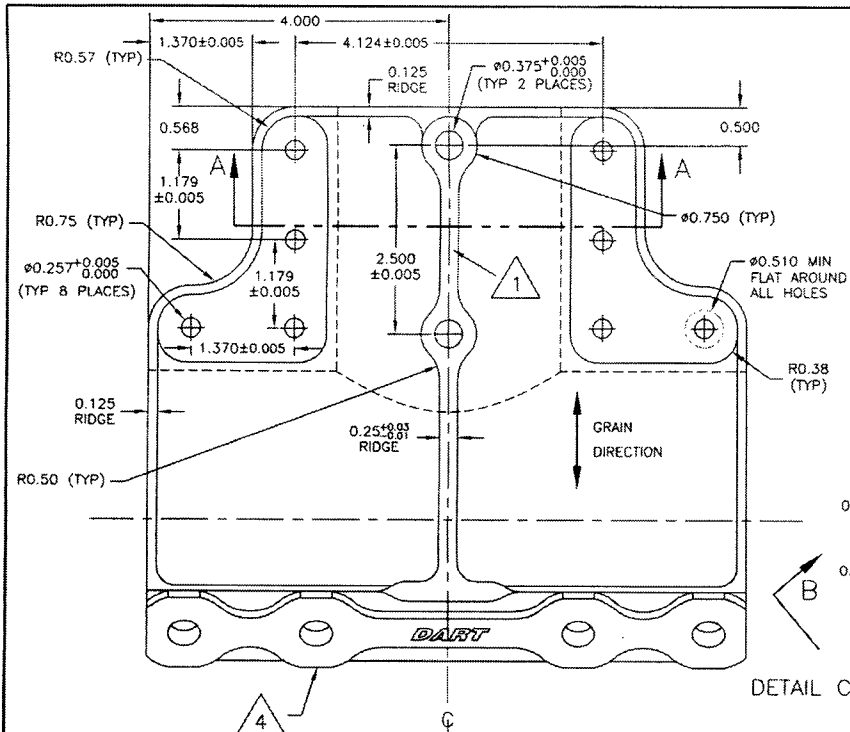
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

05.12.06



## NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)

(REF DART SPEC. D6102-001)

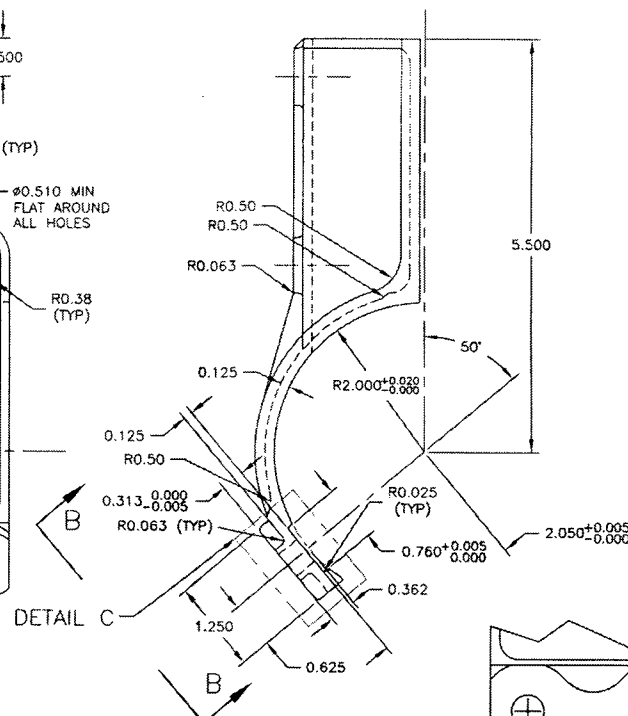
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1

POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3

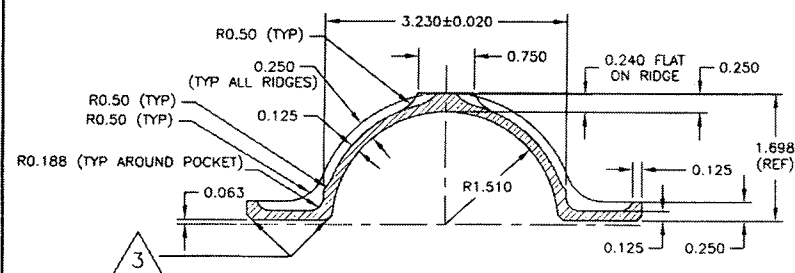
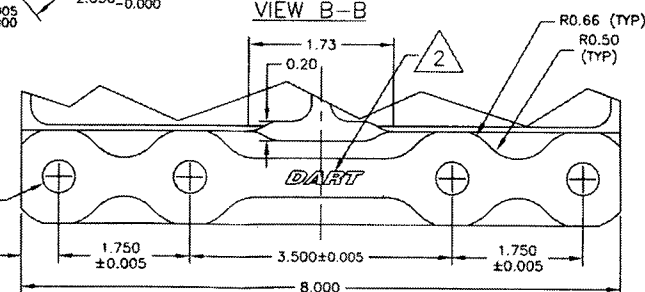
BREAK ALL SHARP EDGES 0.010 TO 0.020

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

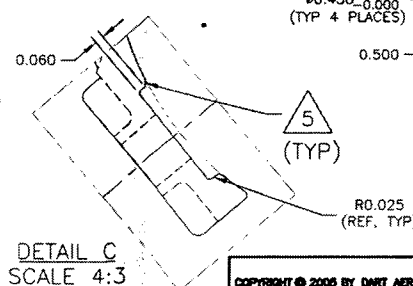
- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)





VIEW B-B



SECTION A-A



DETAIL C  
SCALE 4:3

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DRAWN BY	
DS	PH	<b>DART</b> DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED 	APPROVED 	DRAWING NO. REV. 6 D2573 1 OF 1
DATE		TITLE
05.07.13		OUTER AFT SADDLE

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DART AEROSPACE LTD.

DESIGN	DS
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501001	DRAWN BY	PH
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**DART**

**DART AEROSPACE LTD.**  
MARKHAM, ONTARIO, CANADA

CHECKED 

APPROVED

DRAWING NO  
D2573

3.

REV. 8  
SHEET 1 OF 1

DATE  
05.07.13

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1	TITLE
2	OUTER AFT SADDLE

SCALE

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 869100 ML5 12/07/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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